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ABSTRACT

This handbook is one in a series prepared for use at workshops designed to help teachers, administrators, and legislators understand and deal with the intricacies of school finance equalization plans in their states. Rhode Island's education finance plan is discussed in this particular book. Chapter 1 discusses how Rhode Island's plan undertakes its equalization objective--namely, how state aid is distributed to make up for the differences among districts in needs, demands, and abilities to pay. A step-by-step calculation of a district's basic pupil allowance is outlined, and exercises for understanding the state aid formulas are provided. Chapter 2 evaluates the impact of the state's finance plan by discussing the way the plan addresses disparities both in the raising and in the distribution of resources for education. Property wealth, tax effort, and expenditures among Rhode Island school districts are also reviewed, and tables are provided throughout. The end of the report includes appendices with additional information and an answer key to the exercises. (Author/ID)

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MONEY AND EDUCATION

A GUIDE TO RHODE ISLAND SCHOOL FINANCE

ED177698

by
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September 1979

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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PREFACE

This publication is the result of a National Institute of Education grant to the American Federation of Teachers who worked in cooperation with the Educational Policy Research Institute of the Education Testing Service.

A "Guide to Rhode Island School Finance" is one of a series of handbooks prepared for use at workshops designed to assist teachers, administrators, legislators and other interested parties in understanding and dealing with the intricacies of school finance equalization plans in their states. In the past these issues have been debated in relative isolation by a handful of experts.

States were selected for analysis either because they are currently undergoing significant changes in their education finance systems or because current within state disparities suggest that new finance legislation may soon be considered. Workshops have been conducted in California, Florida, Illinois, Michigan, Ohio, New York, Pennsylvania, Rhode Island and Texas and work will continue in two additional states this year.

It is our hope that through the dissemination of these handbooks, to a wider audience of informed individuals, many more people will be able to effectively take part in the debates and decisions affecting the financing of our nation's schools.

David R. Mandel
Acting Assistant Director
Educational Finance
Program

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CHAPTER 1

STATE SUPPORT FOR ELEMENTARY AND SECONDARY EDUCATION

The revenue available to a Rhode Island school district is a combination of locally raised revenue, revenue provided by the state and federal revenue. During 1976-1977, 63 percent of the revenue available to Rhode Island's school districts was raised through local tax efforts, 34.5 percent of the revenue was provided by the state and the remaining 2.5 percent was federal aid. The subject of this chapter is state support for education in Rhode Island and specifically the method by which state aid is distributed to school districts.

In Rhode Island, like other states, state aid to school districts is distributed on the basis of an equalization formula intended to address differences in educational needs, demands and abilities to pay for services. Rhode Island's School Finance Plan attempts to equalize the revenue that is available to school districts for the cost of each student's education. However, Rhode Island's school finance plan is unusual in the way in which it undertakes this equalization objective. First, unlike other states, which rely upon categorical aid programs to support and encourage the delivery of special programs and services, Rhode Island's School Finance Plan provides aid for most programs and services, including those addressing special needs, through a single comprehensive state aid distribution formula. Second, Rhode Island's School Finance Plan recognizes that property wealth alone may not be a good measure of the ability of district residents to support education and therefore has included a measure of income wealth in its definition of ability to pay for education. Third, Rhode Island's School Finance Plan accounts for differences among districts in the cost of providing programs and services as well as local support for education by emphasizing district expenditures in the distributional formula.

This chapter describes Rhode Island's School Finance Plan. It is predicated on the assumption that understanding your state's school finance plan requires a working knowledge of how it operates. Therefore, the major features of Rhode Island's plan are outlined, including the step-by-step calculation of a district's state aid allocation. To assist you in understanding Rhode Island's state aid formula, exercises appear throughout the chapter. You should complete each set of exercises before proceeding to new material. In addition, a glossary of pertinent terms is located at the end of the manual.

Rhode Island's School Finance Plan

Under Rhode Island's School Finance Plan every school district receives a certain percentage (called the State Share Ratio) of the district's Expenditures for elementary and secondary education as State Aid. State Aid per pupil is calculated by multiplying the district's Expenditures per pupil by the State Share Ratio. Thus,

State Aid Per Pupil	=	State Share Ratio	x	Expenditures Per Pupil

For example, a district with a State Share Ratio of .50 and $1,000 per pupil in Expenditures will receive .50 x $1,000 or $500 per pupil of State Aid.

State Share Ratio

To determine a district's State Aid per pupil you must first calculate the district's State Share Ratio. This requires two steps: 1) determining the district's aid under a Foundation Program; and 2) determining the State Share of the Foundation Program.

1. Foundation Aid

The first step in determining the State Share Ratio is the calculation of Foundation Aid for a district. Foundation Aid is determined using an equalization formula known as a Minimum Foundation Program. This program addresses disparities in district ability to support education and is the most popular type of State Aid distribution program. In this program, the state establishes a per pupil cost it will support and guarantees every school district will have at least this amount per pupil. In Rhode Island, this guaranteed amount is known as the Cost of the Basic Program. To participate in the program, a school district is required to levy a state determined tax rate, known as the Standard Tax Rate, on the district's wealth. The local contribution to the Cost of the Basic Program is known as the Local Share. Foundation Aid per pupil is the difference between the Cost of the Basic Program and the Local Share. Thus,

Foundation Aid Per Pupil	=	Cost of the Basic Program Per Pupil	-	Local Share Per Pupil

Cost of the Basic Program

Rhode Island's Foundation Program guarantees a basic amount of money for the cost of each student's education known as the Cost of the Basic Program. This guaranteed amount consists of two parts: 1) a fixed amount called the Mandated Minimum Program; 2) plus a variable amount for the Transportation Costs in each district. Thus,

Cost of the Basic Program Per Pupil	=	Mandated Minimum Program Per Pupil	+	Transportation Cost Per Pupil

The Mandated Minimum Program is established by the State Board of Regents and has been set at $900 per pupil since 1976-77. Every school district is guaranteed $900 per pupil. In addition, each district is guaranteed a per pupil amount for transportation. This amount is the actual Transportation Cost of each district for the previous year. Thus, the Cost of the Basic Program for 1978-79 of a district with 1977-78 Transportation Costs of $50 per pupil will be the Mandated Minimum Program of $900 + $50 or $950 per pupil.

The inclusion of Transportation Costs in the Cost of the Basic Program is intended to aid rural districts because higher transportation costs are usually associated with sparsely populated districts. Since Rhode Island's districts have different Transportation Costs, each district will have a different Cost of the Basic Program. Table 1 shows the calculation of the Cost of the Basic Program for three districts with different Transportation Costs per pupil. District A with a Transportation Cost of $25 per pupil is guaranteed $925 per pupil, whereas District C with a Transportation Cost of $100 per pupil has $1,000 per pupil as the Cost of the Basic Program.

TABLE 1

CALCULATION OF THE COST OF THE BASIC PROGRAM

District	Mandated Minimum Program Per Pupil	Transportation Cost Per Pupil	Cost of the Basic Program Per Pupil
A	$900	$ 25	$ 925
B	900	50	950
C	900	100	1,000

Exercises on the Cost of the Basic Program

Cost of the Basic Program Per Pupil = Mandated Minimum Program Per Pupil ($900) + Transportation Cost Per Pupil

1. A district has a Mandated Minimum Program of $900 and Transportation Costs of $76 per pupil. What is the Cost of the Basic Program for this district?

   a. $900
   b. 824
   c. 976
   d. 76

2. A district's Transportation Costs are $55 per pupil. What is the Cost of the Basic Program for this district?

   a. $ 55
   b. 900
   c. 955
   d. 845

3. A district's Transportation Costs are $125 per pupil. What is the Cost of the Basic Program for this district?

   a. $125
   b. 925
   c. 900
   d. None of the above

Local Share

You have just learned how to calculate the Cost of the Basic Program. Remember that Foundation Aid is the Cost of the Basic Program minus the Local Share. The Local Share is the amount that a local school district is required to contribute to the Cost of the Basic Program. It is determined by multiplying the district's wealth per pupil by a state determined tax rate, known as the Standard Tax Rate. Thus,

Local Share Per Pupil	=	Standard Tax Rate	x	District Wealth Per Pupil

Standard Tax Rate. The Standard Tax Rate is a uniform tax rate set by the state to determine the Local Share. It is a computational tax rate used to calculate the Local Share and is computed yearly by the state. It is computed so that a district of average wealth per pupil and with an average Cost of the Basic Program will receive 35 percent of the Cost of the Basic Program from the state. (For a full explanation of the calculation of the Standard Tax Rate see Appendix A.) The Standard Tax Rate for 1978-79 is 18.91 mills. Mills can be expressed as dollars per thousand dollars and the tax rate can therefore be expressed as $18.91 per thousand or .01891.

District Wealth. A district's wealth is its adjusted Equalized Weighted Assessed Valuation. Equalized Weighted Assessed Valuation (EWAV) is an attempt to arrive at a property valuation for each district which is comparable across districts. A district's adjusted EWAV is EWAV adjusted for median family income. This adjustment reflects the district's median family income relative to the statewide median family income. (A full explanation of EWAV and the adjustment for median family income appears later in this chapter.)

Wealth per pupil is found by dividing a district's total adjusted EWAV by the number of pupils in the district. For example a district with $10,000,000 of wealth and 1,000 pupils has $10,000,000 divided by 1,000 or $10,000 per pupil in wealth. For the purpose of determining a district's wealth per pupil, Rhode Island's Foundation Plan uses a pupil count known as Resident Average Daily Membership (RADM). Resident Average Daily

Membership is the average number of resident pupils enrolled in school on a school day. However, only one-half (.50) of the kindergarten enrollment is included in the calculation of a district's RADM. For example, assume a district has an average kindergarten enrollment of 200; this district has a kindergarten RADM of 200 x .50 or 100. Thus, if this district has 900 RADM in grades 1 through 12, it will have 900 + 100 or 1,000 RADM.

Now that you understand the Standard Tax Rate and per pupil wealth, let us return to the problem of calculating the Local Share. Remember, the Local Share is the district's wealth (adjusted EWAV) multiplied by the Standard Tax Rate (.01891). Thus, a district with an adjusted EWAV of $10,000 per pupil has a Local Share of $10,000 x .01891 or $189.10 per pupil.

Districts with high wealth per pupil have a higher Local Share than low wealth districts. Table 2 shows the calculation of the Local Share for three districts. District A with wealth of $10,000 per pupil has a Local Share of $189.10 per pupil whereas District C with wealth of $40,000 per pupil is required to contribute $756.40 toward the Cost of the Basic Program.

TABLE 2

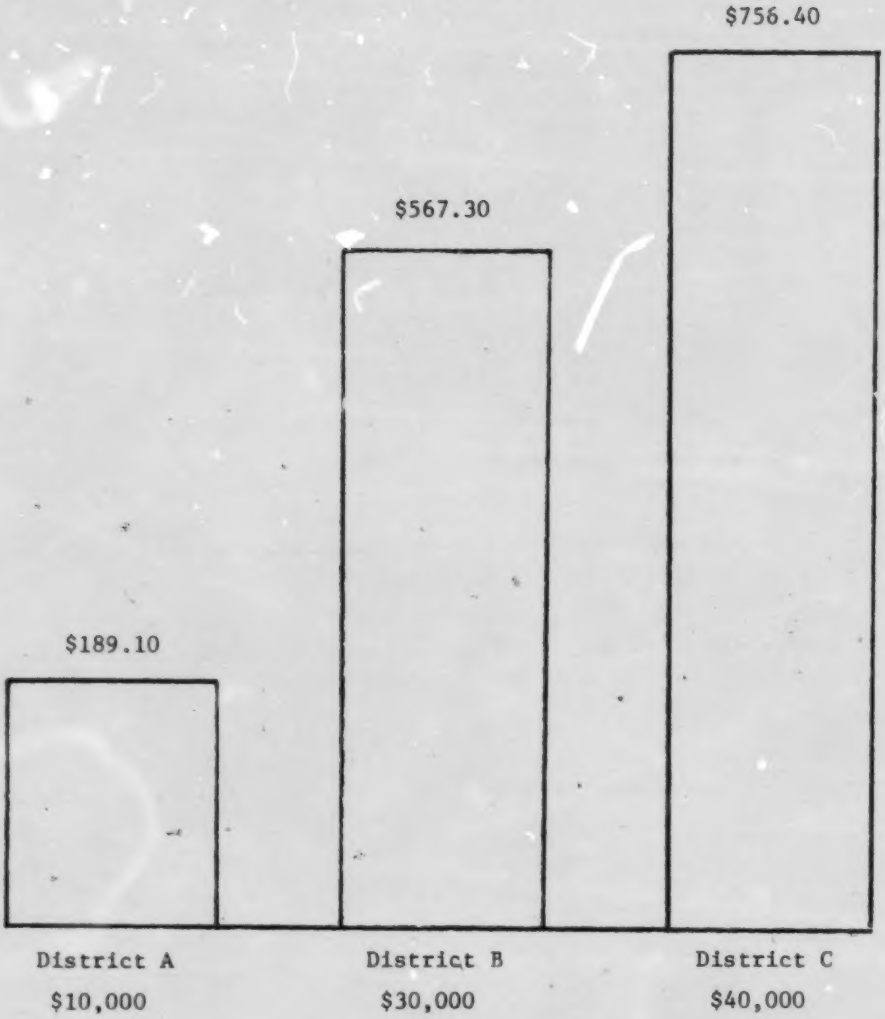
CALCULATION OF THE LOCAL SHARE

District	District Wealth Per Pupil	Standard Tax Rate	Local Share Per Pupil
A	$10,000	.01891	$189.10
B	30,000	.01891	567.30
C	40,000	.01891	756.40

Figure 1 shows the effect of wealth on the Local Share for our three districts in Table 2.

Figure 1:

EFFECT OF WEALTH ON LOCAL SHARE



Note in Figure 1:

- District Wealth Per Pupil is displayed at the bottom of each bar. The Local Share is presented at the top of each bar.
- The Local Share is the amount raised by multiplying the District Wealth Per Pupil by the Standard Tax Rate of .01891.

Exercises on Local Share

Local Share Per Pupil	=	Standard Tax Rate (.01891)	x	District Wealth Per Pupil

4. What is the RADM of a district with 500 kindergarten pupils in average membership and 8,000 grade 1-12 pupils in average membership?

   a. 500
   b. 8,000
   c. 8,500
   d. 8,250

5. A district with 1,200 RADM and an adjusted EWAV of $42,000,000 has what wealth per pupil?

   a. $42,000
   b. 12,000
   c. 35,000
   d. None of the above

6. A district with an adjusted EWAV of $16,000 per pupil contributes how much toward the Cost of the Basic Program?

   _____

7. What is the Local Share per pupil of a district with an adjusted EWAV per pupil of $22,000?

   _____

8. What is the Local Share per pupil of a district with a total adjusted EWAV of $40,000,000 and 1,000 RADM?

   a. $ 436.40
   b. 736.40
   c. $40,000.00
   d. None of the above

Calculation of Foundation Aid

Now that you can calculate the Local Share, you can determine Foundation Aid per pupil. Remember,

Foundation Aid Per Pupil	=	Cost of the Basic Program Per Pupil	-	Local Share Per Pupil

You have seen that the guaranteed Cost of the Basic Program is the Mandated Minimum Program of $900 per pupil plus the Transportation Costs per pupil of the district. The Local Share is the district's adjusted EWAV per pupil multiplied by the Standard Tax Rate of .01891. Recall that our example district with an adjusted EWAV of $10,000 per pupil has a Local Share of $189.10 per pupil. Assume the Cost of the Basic Program for this district is $1,000 per pupil. Foundation Aid for this district is then:

Foundation Aid	=	$1,000.00	-	$189.10
	=	$810.90		

One purpose of Rhode Island's Foundation Program is to lessen the disparity in the ability of districts to raise revenue for education. Therefore, low wealth districts are entitled to more Foundation Aid than high wealth districts. You have already seen that the Local Share increases as the wealth per pupil increases. Table 3 shows Foundation Aid per pupil for our three districts from Table 2 assuming each has a Basic Program Cost of $1,000. District A with wealth of $10,000 per pupil is entitled to $810.90 per pupil in Foundation Aid, whereas District C with wealth of $40,000 per pupil is entitled to only $243.60 per pupil.

TABLE 3

CALCULATION OF FOUNDATION AID

District	District Wealth Per Pupil	Cost of the Basic Program Per Pupil	Local Share Per Pupil	Foundation Aid Per Pupil
A	$10,000	$1,000	$189.10	$810.90
B	30,000	1,000	567.30	432.70
C	40,000	1,000	756.40	243.60

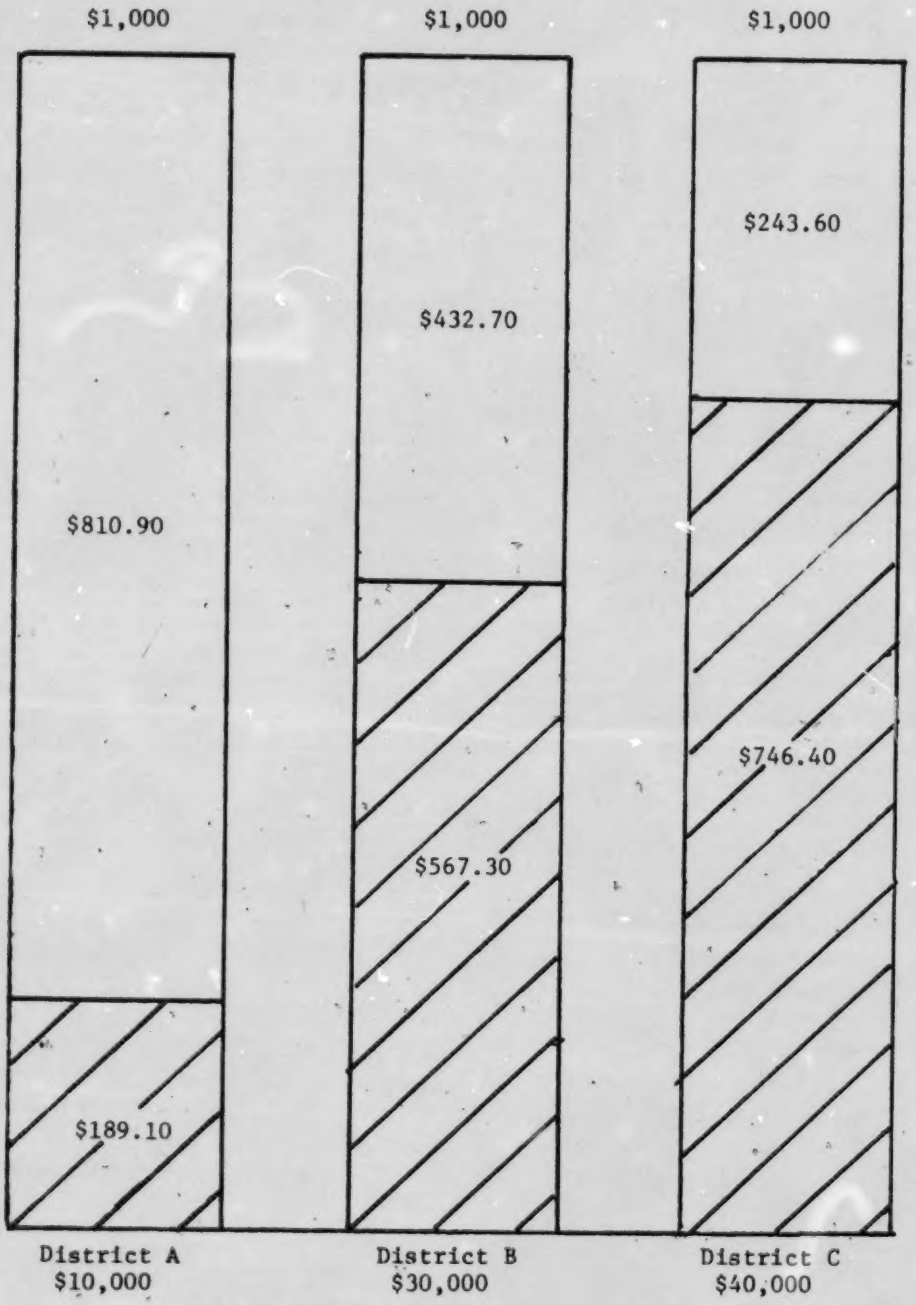
Figure 2 shows the Local Share and Foundation Aid as components of the Cost of the Basic Program for the three districts in Table 3.

Note in Figure 2:

- The wealth of each district is listed at the bottom of each bar. The Cost of the Basic Program is at the top of each bar.
- The Local Share is the marked area at the bottom of each bar. Foundation Aid per pupil is represented by the white area.
- Foundation Aid makes up the difference between the Cost of the Basic Program and the Local Share.

Figure 2

LOCAL SHARE AND FOUNDATION AID AS COMPONENTS OF THE COST OF THE BASIC PROGRAM



Exercises on the Calculation of Foundation Aid

Foundation Aid Per Pupil	=	Cost of the Basic Program Per Pupil	-	Local Share Per Pupil
Cost of the Basic Program Per Pupil	=	Mandated Minimum Program Per Pupil ($900)	+	Transportation Cost Per Pupil
Local Share Per Pupil	=	Standard Tax Rate (.01891)	x	District Wealth Per Pupil

9. A district with a Cost of the Basic Program of $1,600 and a Local Share of $450 per pupil has what Foundation Aid per pupil?

   a. $1,600.00
   b. 450.00
   c. 1,250.00
   d. 1,150.00

10. What is the Foundation Aid per pupil of a district with $400 per pupil in Transportation Costs and a Local Share of $600 per pupil?

   a. $ 400.00
   b. 1,300.00
   c. 900.00
   d. None of the above

11. What is the Foundation Aid per pupil for a district with $1,200 as the Cost of the Basic Program and an adjusted EWAV per pupil of $24,000?

   a. $763.44
   b. 453.84
   c. 746.16
   d. Not enough information

12. What is the Foundation Aid per pupil of a district with $1,400 as the cost of the Basic Program, a total adjusted EWAV of $30,000,000 and 1,500 RDAM?

   a. $ 378.20
   b. 1,400.00
   c. 1,021.80
   d. None of the above

13. What is the Foundation Aid of a district with Transportation Costs of $300 per pupil for 1976-77, a total adjusted EWAV of $60,000,000 and 2,000 RADM?

   a. $ 632.70
   b. 332.70
   c. 1,200.00
   d. 900.00

2. State Share Ratio

In many states, the Foundation Aid per pupil you have just learned how to calculate is the actual per pupil amount of state aid a district receives. However, in Rhode Island, the calculation of Foundation Aid is just a step in determining a district's State Share Ratio. Once Foundation Aid per pupil has been determined, you need to calculate the state share of the Foundation Program, You then need to establish the State Share Ratio for each district. For most districts, the State Share Ratio and the state share of the Foundation Program are the same. However, Rhode Island's School Finance Plan establishes a floor on the State Share Ratio. It provides that no district will have a State Share Ratio of less than 30 percent or .30. If a district has a state share of the Foundation Program that is less than .30, it will be assigned .30 as its State Share Ratio. Thus, the determination of the State Share Ratio requires two steps: 1) determining the state share of the Foundation Program; and 2) comparing the state share of the Foundation Program to .30.

How do you determine the state share of the Foundation Program? The state share is the district's Foundation Aid per pupil divided by the district's Cost of the Basic Program per pupil. Thus,

State Share of the Foundation Program = Foundation Aid Per Pupil / Cost of the Basic Program Per Pupil

Recall our district with $10,000 of wealth per pupil and $1,000 as the Cost of the Basic Program was entitled to $810.90 per pupil of Foundation Aid. The state share of the Foundation Program for this district is then $810.90 divided by $1,000 or .81. This indicates Foundation Aid represents 81 percent of the district's Cost of the Basic Program.

Once you have calculated the state share of the Foundation Program you need to compare the state share to .30. If the state share is above .30, the state share of the Foundation Program and the State Share Ratio used in calculating State Aid are the same. Thus, the State Share Ratio for our example district is the same as its state share of the Foundation Program, .81.

Table 4 shows the calculation of the state share of the Foundation Program and the State Share Ratio for our three districts in Table 3.

TABLE 4

CALCULATION OF STATE SHARE RATIO

District	Cost of the Basic Program Per Pupil	Foundation Aid Per Pupil	State Share of the Foundation Program	State Share Ratio
A	$1,000	$810.90	.81	.81
B	1,000	432.70	.43	.43
C	1,000	243.60	.24	.30

Note in Table 4:

- The state share is the district's Foundation Aid divided by the Cost of the Basic Program for the district. Thus, the state share for District B is $432.70/$1,000 or .43.
- Districts that are entitled to more Foundation Aid relative to the Cost of the Basic Program have a higher state share of the Foundation Program. District A with $810.90 per pupil of Foundation Aid has a state share of .81 whereas District C with $243.60 per pupil of Foundation Aid has a state share of .24.
- The State Share Ratio and state share of the Foundation Program are not the same for District C. This is because District C has a state share that is less than .30.

Exercises on State Share Ratio

State Share Ratio (.30 or greater) = Foundation Aid Per Pupil / Cost of the Basic Program Per Pupil

Foundation Aid Per Pupil = Cost of the Basic Program Per Pupil - Local Share Per Pupil

Local Share Per Pupil = Standard Tax Rate (.01891) x District Wealth Per Pupil

14. A district with $960 as the Cost of the Basic Program and $330 per pupil of Foundation Aid has what State Share Ratio?

    a. .3438
    b. .6563
    c. 1.5238
    d. None of the above

15. What is the State Share Ratio for a district with $1,400 per pupil as the Cost of the Basic Program and a Local Share of $1,000 per pupil?

    a. .3000
    b. .2857
    c. .7143
    d. None of the above

16. A district with $75 per pupil of Transportation Costs and a Local Share of $325 per pupil has what State Share Ratio?

    a. .6389
    b. .6667
    c. .3333
    d. None of the above

17. A district with $1,250 per pupil as the Cost of the Basic Program and an adjusted EWAV of $32,000 per pupil has what State Share Ratio?

    a. .4841
    b. .5159
    c. .3479
    d. None of the above

18. What is the State Share Ratio for a district with a Transportation Cost of $125 per pupil and an adjusted EWAV per pupil of $28,000?

    a. .3874
    b. .5166
    c. .4834
    d. None of the above

19. What is the State Share Ratio for a district with a total adjusted EWAV of $60,000,000; 2,000 RADM and Transportation Costs of $80 per pupil?

a. .4100
b. .5789
c. .7275
d. None of the above

State Aid

Now that you have seen how to determine a district's State Share Ratio, you can determine State Aid per pupil. Remember,

State Aid Per Pupil	=	State Share Ratio	x	Expenditures Per Pupil

For example, a district with a State Share Ratio of .81 and $2,000 per pupil of Expenditures will recieve .81 x $2,000 or $1,620 per pupil of State Aid.

It is important to note that a district's Expenditures per pupil are different than the Cost of the Basic Program. Recall that the Cost of the Basic Program is the Mandated Minimum of $900 per pupil plus the district's Transportation Costs. A district's Expenditures, however, are determined by the district and are not limited to the Cost of the Basic Program. A district can decide to spend more than the Cost of the Basic Program. However, no district can spend less than the State Mandated Minimum Program of $900 per pupil and participate in the State Aid program. A district's expenditures include current expenditures for school operation; this does not include state categorical aid or federal aid. (For an explanation of Expenditures per pupil see Appendix B).

Under Rhode Island's School Finance Plan, low wealth districts receive more State Aid per pupil than high wealth districts. Table 5 shows the calculation of State Aid for our three districts in Table 4 assuming each has $2,000 per pupil of Expenditures. District A with an adjusted EWAV of $10,000 per pupil receives $1,620 per pupil of State Aid, whereas District C with $40,000 per pupil receives $600 per pupil of State Aid. Remember District C's state share was .24, but its State Aid per pupil is based on the minimum State Share Ratio of .30.

TABLE 5

CALCULATION OF STATE AID: LESSENING DISPARITIES IN WEALTH

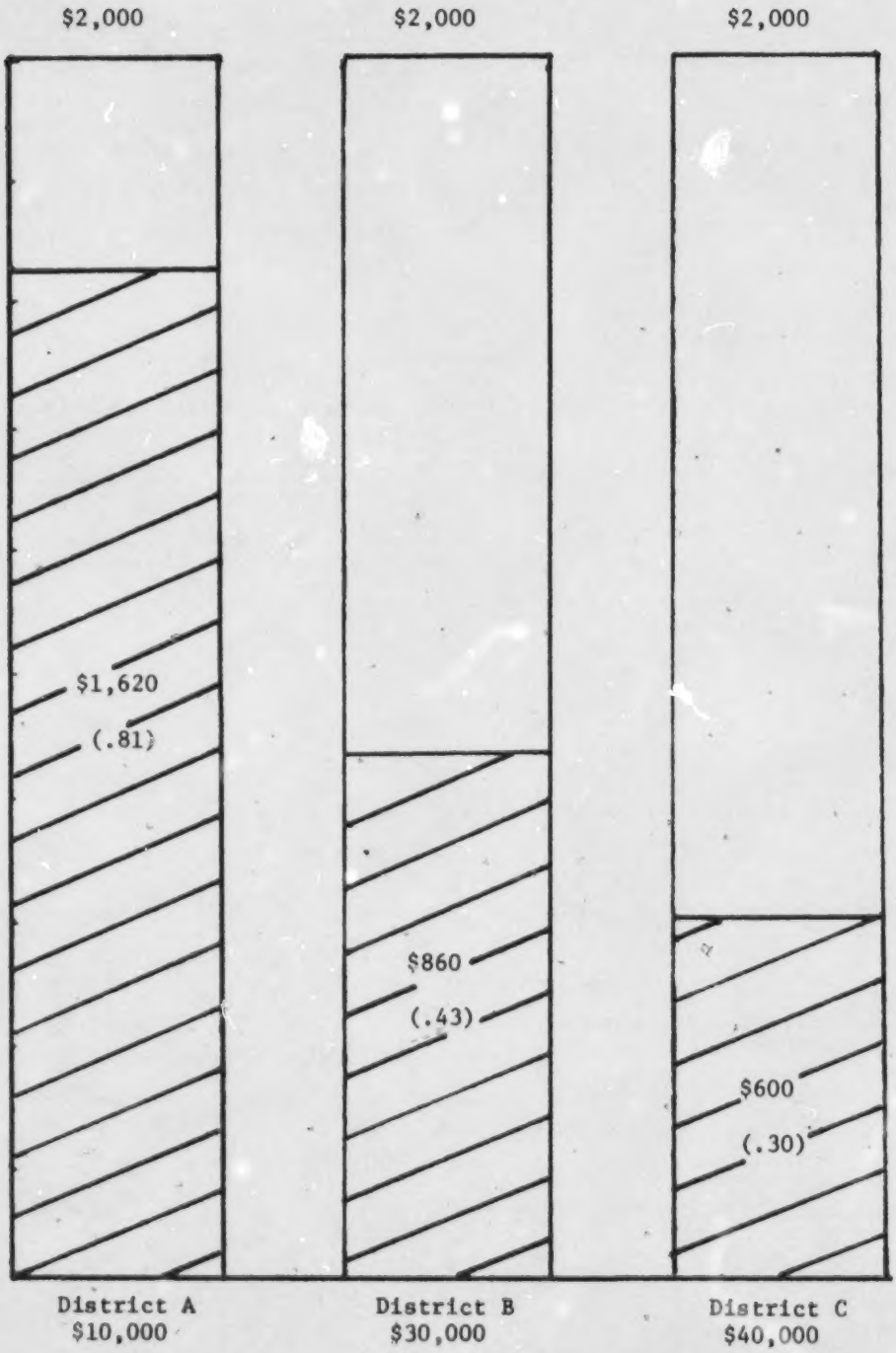
District	Wealth Per Pupil	State Share Ratio	Expenditures Per Pupil	State Aid Per Pupil
A	$10,000	.81	$2,000	$1,620
B	30,000	.43	2,000	860
C	40,000	.30	2,000	600

Figure 3 shows State Aid as a component of Expenditures per pupil for our three districts in Table 5. Note in Figure 3:

- District Wealth per pupil is at the bottom of each bar. District Expenditures per pupil are at the top of each bar.
- State Aid is the marked area within each bar. Both State Aid per pupil and the State Share Ratio are displayed.
- State Aid is a larger share of the per pupil Expenditures of low wealth districts.

Figure 3

STATE AID AS A COMPONENT
OF EXPENDITURES



You have seen that Rhode Island's School Finance Plan compensates districts with low wealth. It also provides more State Aid to districts with higher expenditures. This reflects the assumption that different districts have different costs and commitments to supporting education. Table 6 shows the relationship between Expenditures and State Aid. Each district has the same State Share Ratio, .43, but different Expenditures per pupil. District A with a per pupil Expenditures of $1,000 receives $430 per pupil of State Aid whereas District C with $2,000 of Expenditures per pupil receives $860 per pupil of State Aid.

TABLE 6

CALCULATION OF STATE AID: EFFECT OF HIGHER EXPENDITURES

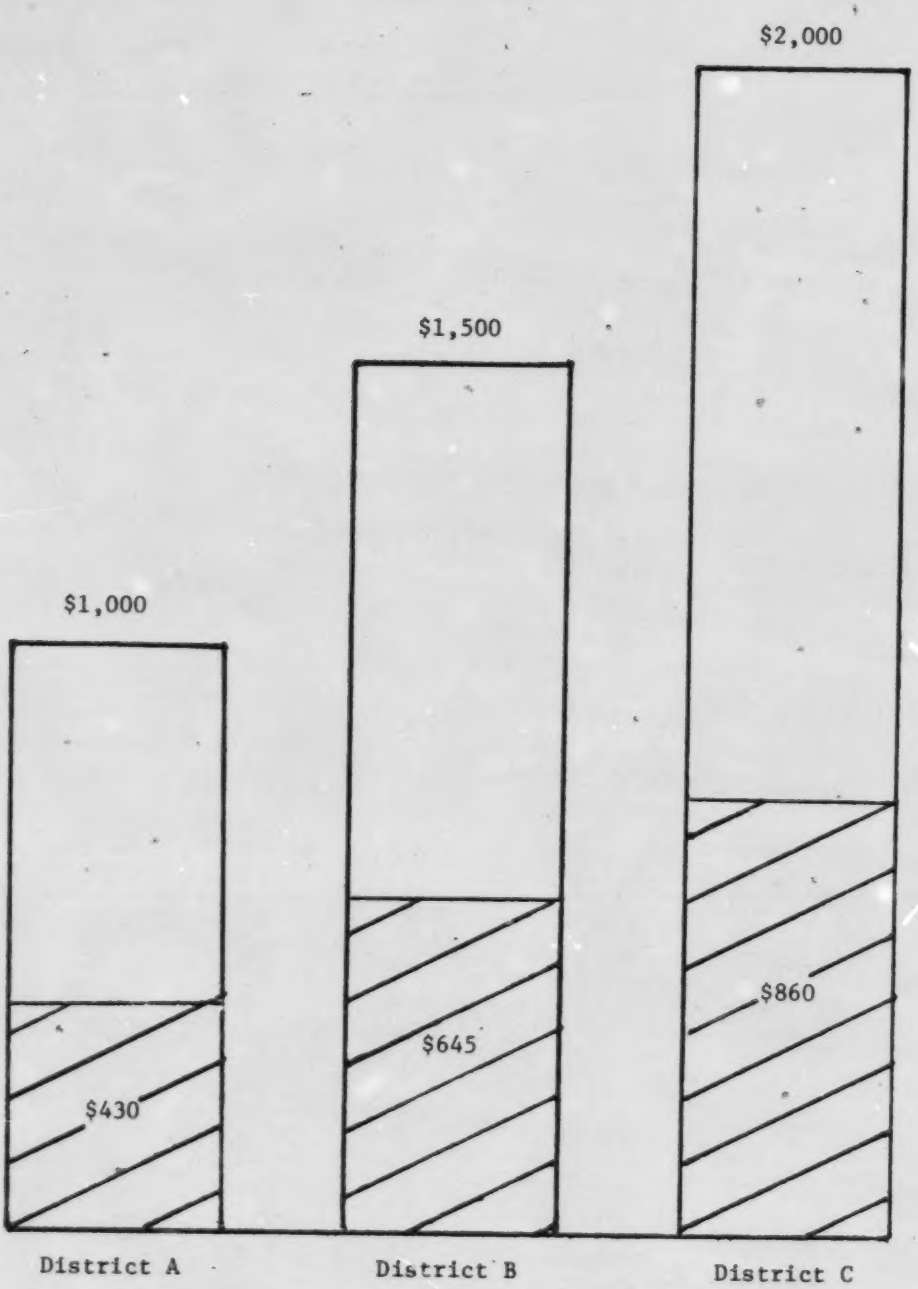
District	State Share Ratio	Expenditures Per Pupil	State Aid Per Pupil
A	.43	$1,000	$430
B	.43	1,500	645
C	.43	2,000	860

Figure 4 shows State Aid as a component of per pupil Expenditures for our three districts in Table 6. Note in Figure 4:

- The district's per pupil Expenditures are labeled at the top of each bar.
- The State Share Ratio is .43 for each district.
- Although the percentage remains the same for our three districts; districts with higher per pupil Expenditures receive more State Aid.

Figure 4

EFFECT OF HIGHER EXPENDITURES
ON STATE AID



Exercises on State Aid

State Aid Per Pupil = State Share Ratio x Expenditures Per Pupil

State Share Ratio (.30 or greater) = Foundation Aid Per Pupil / Cost of the Basic Program Per Pupil

Foundation Aid Per Pupil = Cost of the Basic Program Per Pupil - Local Share Per Pupil

20. What is the State Aid per pupil for a district with a State Share Ratio of .74 and $1,275 per pupil of Expenditures?

_____

21. What is State Aid per pupil for a district with $1,650 per pupil of Expenditures and State Share Ratio of .26?

_____

22. What is the State Aid per pupil for a district with $1,400 per pupil as the Cost of the Basic Program, a Local Share of $900 per pupil and $2,300 per pupil of Expenditures?

a. $1,478.67
b. 500.00
c. 821.33
d. None of the above

23. What is the State Aid per pupil for a district with $1,200 as the Cost of the Basic Program; $600 per pupil of Foundation Aid and $1,800 per pupil of Expenditures?

a. $ 900.00
b. 1,200.00
c. 600.00
d. None of the above

24. A district with $125 per pupil of Transportation Costs, a total adjusted EWAV of $25,000 per pupil and $1,600 per pupil of Expenditures receives what amount of State Aid per pupil?

a. $1,151.84
b. 552.25
c. 737.92
d. 862.08

25. A district with $450 per pupil of Transportation Costs, 1,500 RADM, a total adjusted EWAV of $90,000,000 and a per pupil Expenditure of $2,100 receives what amount of State Aid per pupil?

a. $766.59
b. 345.00
c. 630.00
d. None of the above

Alternative Calculation of State Aid

Under Rhode Island's School Finance Plan a district may obtain more State Aid by using an alternative calculation of the State Share Ratio. The alternative calculation of the State Share Ratio is based on a different method of counting RADM and uses a different Standard Tax Rate for calculating Foundation Aid. The alternative pupil count includes public, private, and parochial resident pupils in average daily membership. This pupil count, which you will see labeled as either Combined RADM or Public and Nonpublic RADM will always be larger than the RADM count you have learned that only included public school pupils. Due to the different method of counting RADM there will be a lower adjusted EWAV per pupil than that based on public school RADM alone. In addition, due to the different pupil count, there is a different Standard Tax Rate (see Appendix A for the role of RADM in the calculation of the Standard Tax Rate) used in the calculation of the Local Share. For 1978-79, the Standard Tax Rate used in the alternative calculation of the State Share Ratio is .02178. Because of the higher Standard Tax Rate, a district is not necessarily assured a higher State Share Ratio using the alternative calculation of State Aid.

Alternative Foundation Aid

The formula used to calculate Foundation Aid under the Alternative Formula is the same as the formula you have already learned. Thus,

Foundation Aid Per Pupil	=	Cost of the Basic Program Per Pupil	-	Local Share Per Pupil

Table 7 compares the calculation of Foundation Aid under the Regular Formula (public RADM) and the Alternative Formula (combined RADM). The example district has a total Transportation Cost of $15,000, a total Adjusted EWAV of $15,000,000; 1,000 Public RADM and 1,500 Combined RADM.

Part 1 of Table 7 shows the calculation of the Cost of the Basic Program. Under the Regular Formula the district has a pupil count of 1,000 whereas under the Alternative Formula the district has a pupil count of 1,500. The Cost of the Basic Program is $915 per pupil under the Regular Program and $910 per pupil under the Alternative Program.

Part 2 of Table 7 shows the calculation of the Local Share under each formula. Remember, the Standard Tax Rate for the Alternative Formula is higher than the Standard Tax Rate used in the Regular Formula. The alternative Standard Tax Rate is .02178.

Finally, part 3 of Table 7 shows the calculation of Foundation Aid under each formula. Our hypothetical district receives more Foundation Aid under the Alternative Formula; $692.20 per pupil as opposed to $631.35 per pupil.

TABLE 7

FOUNDATION AID
(COMPARISON OF TWO FORMULAS)

Part 1: Cost of Basic Program Per Pupil

Formula	Total Transportation Costs	RADM	Transportation Costs Per Pupil	Mandated Minimum Program	Cost of the Basic Program Per Pupil
Public RADM	$15,000	1000	$15.00	$900.00	$915.00
Combined RADM	15,000	1500	10.00	900.00	910.00

Part 2: Local Share Per Pupil

Formula	Total Adjusted EWAV	RADM	Adjusted EWAV Per Pupil	Standard Tax	Local Share Per Pupil
Public RADM	$15,000,000	1000	$15,000	.01891	$283.65
Combined RADM	15,000,000	1500	10,000	.02178	217.80

Part 3: Foundation Aid Per Pupil

Formula	Cost of the Basic Program Per Pupil	Local Share Per Pupil	Foundation Aid Per Pupil
Public RADM	$915.00	$283.65	$631.35
Combined RADM	910.00	217.80	692.20

State Share Ratio

Once you have determined Foundation Aid under each formula you can calculate the State Share Ratio. Remember:

State Share Ratio	=	Foundation Aid Per Pupil	/	Cost of the Basic Program Per Pupil

Also remember the State Share is subject to a minimum of .30. Table 8 shows the State Share Ratio for our district using both formulas.

TABLE 8

STATE SHARE RATIO
(COMPARISON OF FORMULAS)

Formula	Foundation Aid Per Pupil	Cost of the Basic Program Per Pupil	State Share Ratio
Public RADM	$631.35	$915.00	.69
Combined RADM	692.20	910.00	.76

Our district has a higher State Share Ratio using the Alternative Formula. Therefore, it will use the Alternative Formula to calculate State Aid.

State Aid

Once you have determined the State Share Ratio the calculation of State Aid is the same as you have seen before:

State Aid Per Pupil	=	State Share Ratio	x	Expenditures Per Pupil

Therefore, if our district has Expenditures of $2,000 per pupil, its State Aid will be $2,000 x .76 or $1,520 per pupil.

Exercises on Alternative Calculation of State Aid

Foundation Aid Per Pupil = Cost of the Basic Program Per Pupil - Local Share Per Pupil

Local Share Per Pupil = Standard Tax Rate x District Wealth Per Pupil

Standard Tax Rate = Public RADM = .01891
Combined RADM = .02178

State Share Ratio = Foundation Aid Per Pupil / Cost of the Basic Program Per Pupil

State Aid Per Pupil = State Share Ratio x Expenditures Per Pupil

26. Assume a district has Transportation Costs of $24,000, 1,000 Public RADM, and 1,200 Combined RADM. What is the Cost of the Basic Program for this district using Public RADM?

a. $ 24.00
b. 20.00
c. 924.00
d. 920.00

27. What is the Cost of the Basic Program using Combined RADM?

a. $ 24.00
b. 20.00
c. 924.00
d. 920.00

28. Further assume this district has a total adjusted EWAV of $24,000,000. What is this district's Local Share using Public RADM.

a. $453.84
b. 378.20
c. 522.72
d. 435.60

29. What is this district's Local Share using Combined RADM?

a. $453.84
b. 378.20
c. 522.72
d. 435.60

30. What is this district's Foundation Aid using Public RADM?

a. $488.40
b. 470.16
c. 466.16
d. 484.40

31. What is this district's Foundation Aid using Combined RADM?

    a. $488.40
    b. 470.16
    c. 466.16
    d. 484.40

32. What State Share Ratio will this district use to calculate State Aid?

    a. .4912
    b. .5088
    c. .5263
    d. None of the above

33. Assume this district has expenditures per pupil of $3,000. What is this district's State Aid per pupil?

    _____

Hold Harmless

Rhode Island's School Finance Plan provides that no district will receive less than 90% of the total amount of State Aid it received for the Previous year. For example, if a district received $100,000 in State Aid for 1976-77 it will receive at least $100,000 x .90 or $90,000 in 1977-78. If, according to the State Aid calculation you have seen, it would receive less, it will still receive $90,000 is State Aid. This provision is known as a Hold Harmless provision. The Hold Harmless provision applies to State Aid calculated under either formula: the formula using Public RADM or the alternative calculation of State Aid using combined RADM.

Exercises on Hold Harmless

$$\text{Hold Harmless Level} = \text{Prior Year Total State Aid} \times .90$$

34. A district received $300,000 last year in total State Aid. What is the district's Hold Harmless level for this year?

    a. $300,000
    b. 290,000
    c. 200,000
    d. None of the above

35. A district is entitled to $575,000 in total State Aid this year. Last year the district received $600,000 in State Aid. What amount of total State Aid will the district receive this year?

    a. $575,000
    b. 540,000
    c. 600,000
    d. None of the above.

36. A district which received a total of $750,000 of State Aid last year and is entitled to $670,000 in State Aid this year will receive what amount of State Aid?

    a. $625,000
    b. 750,000
    c. 670,000
    d. None of the above

Effect of District Wealth on State Aid

You have seen that a district's State Aid per pupil is the district's Expenditures per pupil multiplied by its State Share Ratio. An important element in the determination of the district's State Share Ratio is its wealth per pupil. Rhode Island's School Finance Plan includes income in the measure of wealth; it is important for you to understand the effect the inclusion of income in the definition of wealth has on a district's State Aid.

Remember, in Rhode Island a district's wealth per pupil for the calculation of State Aid is its adjusted Equalized Weighted Assessed Valuation per pupil. To calculate a district's wealth per pupil requires three steps: 1) determining Equalized Weighted Assessed Valuation (EWAV); 2) determining EWAV per pupil; and 3) adjusting EWAV per pupil by a median family income factor.

1. EWAV. Equalized Weighted Assessed Valuation is an attempt to arrive at a property valuation for each district which is comparable across districts. Each year the Tax Equalization Section of the Department of Community Affairs adjusts the assessments for each city and town, so that all assessments will be at approximately the same percentage of full market value. (An explanation of the calculation of EWAV appears in Appendix C).

2. EWAV per pupil. EWAV per pupil is the total EWAV of a district divided by the number of pupils in the district. You have learned there are two pupil counts in Rhode Island's School Finance Plan: Public RADM and Combined RADM. Most districts receive State Aid on the basis of Public RADM; however, eight districts will receive State Aid in 1978-79 on the basis of the Alternative Formula pupil count -- Combined RADM. It is important to note which pupil count is being used when you examine data.

Once the district's RADM is determined, you can obtain the district's EWAV per pupil by dividing the total EWAV for the district by the total RADM. For example, a district with a total EWAV of $10,000,000 and 1,000 RADM has an EWAV per pupil of $10,000,000 divided by 1,000 or $10,000 per pupil.

3. Adjusted EWAV per pupil. The final step in determining the adjusted EWAV per pupil is to adjust EWAV per pupil by a median family income (M.F.I.) factor. The income factor for each district is found by dividing the median family income for the district as obtained from the 1970 Census by the median family income for the entire state. The 1970 median family income for the state was $9,736. Thus,

District M.F.I. Adjustment Factor	=	District Median Family Income	/	State Median Family Income ($9,736)

For example, a district with a median family income of $4,868 will have an income factor of $4,868 divided by $9,736 or .50. The .50 factor indicates the median family income for this district is only half the amount of the state median family income. This factor is multiplied by the district's EWAV per pupil to obtain the adjusted EWAV per pupil. If the district has an EWAV per pupil of $30,000, its adjusted EWAV is $30,000 x .50 or $15,000 per pupil. This district's property wealth has been cut in half to reflect its income wealth relative to the statewide income wealth.

The adjustment of EWAV by an income factor lowers the wealth of districts with low median family incomes and raises the wealth of districts with high median family incomes relative to the statewide median family income. Table 9 shows the effect of the median family income factors on the wealth of three districts with the same $30,000 of EWAV per pupil but different median family incomes.

TABLE 9

CALCULATION OF ADJUSTED EWAV PER PUPIL:
EFFECT OF ADJUSTMENT FOR MEDIAN FAMILY INCOME

District	EWAV Per Pupil	M.F.I. Adjustment Factor	State Median Family Income	Income Factor	Adjusted EWAV Per Pupil
A	$30,000	$4,868	$9,736	0.50	$15,000
B	30,000	9,736	9,736	1.00	30,000
C	30,000	12,170	9,736	1.25	37,500

Since the income factor affects the wealth of districts, it also affects their Local Share. If each of our districts had an EWAV of $30,000, its Local Share would be $30,000 x .01891 or $567.30 per pupil. Table 10 shows the Local Share for the three districts in Table 9. Each district has the same EWAV of $30,000 per pupil but the income factor for each district is different. District A with an income factor of .50 has a Local Share of $283.70 per pupil, whereas District C with an income factor of 1.25 has a Local Share of $709.10 per pupil.

TABLE 10

CALCULATION OF LOCAL SHARE:
EFFECT OF MEDIAN FAMILY INCOME (M.F.I.) ADJUSTMENT FACTOR

District	EWAV Per Pupil	M.F.I. Adjustment Factor	Adjusted EWAV Per Pupil	Standard Tax Rate	Local Share Per Pupil
A	$30,000	0.50	$15,000	.01891	$283.70
B	30,000	1.00	30,000	.01891	567.30
C	30,000	1.25	37,500	.01891	709.10

You have seen that the Median Family Income adjustment factor affects district wealth and therefore the district's contribution to the Cost of the Basic Program. Thus, the M.F.I. adjustment factor will also affect a district's Foundation Aid, State Share Ratio and State Aid per pupil. Lets assume each of our districts in Table 10 has a Cost of the Basic Program of $1,000 per pupil. Table 11 shows the calculation of Foundation Aid and the State Share Ratio for our three districts.

TABLE 11

EFFECT OF M.F.I. ADJUSTMENT FACTOR ON STATE AID

District	Adjusted EWAV Per Pupil	Cost of the Basic Program Per Pupil	Local Share Per Pupil	Foundation Aid Per Pupil	State Share Ratio
A	$15,000	$1,000	$283.70	716.30	.72
B	30,000	1,000	567.30	432.70	.43
C	37,500	1,000	709.10	290.90	(.30)

Note in Table 11:

- Each district has the same EWAV of $30,000 per pupil. However, due to the Median Family Income adjustment factor each district's EWAV is adjusted such each has a different Local Share per pupil.
- Foundation Aid is the Cost of the Basic Program minus the Local Share. We assume each district has $1,000 per pupil as the Cost of the Basic Program.
- The State Share Ratio is the district's Cost of the Basic Program, $1,000, divided by its Foundation Aid per pupil. District C has a State Share Ratio of (.30) due to the floor on the state share. Its state share was .29.

State Aid is the district's Expenditures multiplied by its State Share Ratio. If we assume each district spends $2,000 per pupil, then District A obtains $1,440 per pupil whereas District C only obtains $580 per pupil. If a district's EWAV per pupil was not adjusted for median fmaily income then each district would have the same State Share Ratio and receive the same amount of State Aid.

Exercises on the Effect of District Wealth on State Aid.

37. A district with an EWAV of $20,000 per pupil and an M.F.I. adjustment factor of 1.10 has what adjusted EWAV per pupil?

    a. $20,000.00
    b. $21,000.00
    c. $22,000.00
    d. $18,181.82

Using the information provided below, answer questions 38 through 42.

Public RADM 2,500

Total EWAV $75,000,000

Cost of the Basic Program $1,200

M.F.I. Adjustment Factor .95

Expenditures per Pupil $1,800

38. What is this district's Local Share per pupil?

    a. $567.30
    b. $545.70
    c. $300.00
    d. None of the above

39. What is this district's State Share Ratio?

    a. .35
    b. .47
    c. .53
    d. None of the above

40. What is State Aid per pupil for this district?

    a. $540
    b. $630
    c. $846
    d. None of the above

41. Would this district receive more or less State Aid if its EWAV was not adjusted for median family income?

    _____

42. Would this district receive more or less State Aid if its M.F.I. Adjustment Factor was 1.15?

    _____

District Revenue

This chapter has described the operation of Rhode Island's State Aid distribution formula. Aid provided on the basis of this formula accounts for the majority, approximately 84 percent in 1976 - 1977, of state aid to public schools. Thus, the majority of state aid is intended to equalize the revenue available to school districts. However, Rhode Island also provides aid to districts for a few special programs and services, called categorical aid. Categorical aid accounts for about 16 percent of the state aid to public schools and includes pupil targeted programs like the Program for Disadvantaged Children, Vocational Education, Programs for Handicapped Children, and Bilingual Program; pupil support services i.e. School Food Services; and a capital support program -- School Housing Aid.

While state equalization and categorical aid comprise a significant share of the revenue available to school districts, the largest share is raised locally, 63 percent in 1976 - 1977. Local revenue is the revenue obtained by taxing the district's wealth. Locally raised revenue is not the same as the Local Share in the calculation of State Aid. Remember, the Local Share is a computational tax rate -- the Standard Tax Rate -- multiplied by district's adjusted EWAV. The Standard Tax Rate, however, is not the tax rate levied by districts to raise revenue locally. However, districts may levy a tax that is higher or lower than the Standard Tax Rate. Thus, the revenue available to a Rhode Island District includes State Aid, revenue raised from the district chosen tax rate, and, in addition, federal aid.

CHAPTER II

STUDYING RHODE ISLAND'S SCHOOL FINANCE PLAN

Since the early decades of this century, one important purpose of most school finance plans has been to achieve greater equity in raising and distributing educational services. Equity is a broad and vague term, but in school finance its meaning has frequently been reduced to measurable differences, or disparities in expenditures and/or services among districts in a state. A glance at the districts within Rhode Island will reveal a variety of such differences, e.g., disparities in the amount of money spent for each pupil; in the tax rate used to raise money for education; in the type of school programs available to students and in the achievement of students. A state school finance plan may be designed to reduce one or some combination of these or other types of disparities. That is, the plan may attempt to "equalize" per pupil expenditures, "equalize" the revenue raised by the districts, "equalize" the program offerings, or "equalize" the achievement levels.

The manner in which "equalization" is defined and measured, and the criteria used to determine if "equalization" is achieved are important considerations in evaluating the impact of a state school finance plan. A plan may go a long way in alleviating the problems of one type of disparity without affecting other types of disparities, or, in fact, worsening other disparities. For example, a plan may "equalize" per pupil expenditures among school districts, but in the process increase the disparities among districts in the tax rate they must apply. Similarly, what is "equalizing" under on definition, measurement or method of analysis may not be "equalizing" under another set of criteria. In other words, there are tradeoffs to be made, and in evaluating the impact of a state finance plan, it is important to investigate its implications under varying concepts or measures of equity.

The first decision that must be made in the formulation of a school finance plan is what is to be "equalized"? A plan may address disparities in raising of resources or it can address the "equalization" of the distribution of resources for education. Most often, it addresses both. Rhode Island's education finance program addresses both types of disparities, and is intended to "equalize" the raising and distributing of resources for education.

Equity in the Raising of Resources

The first step in equalizing the raising of resources for education is to decide upon a definition of equity; either the "same treatment for everyone" or "different treatment for different needs." In Rhode Island, equity in the raising of resources for education is defined as "equal treatment for everyone." For the raising of resources for education, this definition of equity is translated into practice by utilizing a State Share Ratio which varies with district wealth.

Describing Disparities in Wealth

District wealth is a basic part of any state school finance plan since it is used to determine a district's ability to support education. Although in theory "wealth" can be defined in many ways, most states, like Rhode Island, define wealth in terms of property valuation per pupil. In Rhode Island, a district's property valuation for the purposes of calculating State Aid is measured as adjusted Equalized Weighted Assessed Valuation. You have learned that EWAV is an attempt to arrive at a valuation for each district which is comparable across districts. Rhode Island is unique in its treatment of EWAV because it is further adjusted to account for differences among districts in median family income relative to the statewide median family income.

To investigate disparities in wealth we will look at EWAV and adjusted EWAV per pupil. In Table 1, Rhode Island's 33 K-12 districts are arranged from the district with the highest EWAV per pupil to the district with the lowest EWAV per pupil. The table also includes the Median Family Income (M.F.I.) adjustment factor and adjusted EWAV. The pupil count used in Table 1 is public school RADM since this is the most common count used in the calculation of State Aid.

One important way in which Rhode Island's School Finance Plan addresses disparities in district ability to raise revenue for education is by including an income adjustment in its measure of district wealth. The income factor you have learned about will adjust a district's EWAV per pupil upwards or downwards depending upon whether the district's median family income is greater or less than the statewide median family income. The adjusted EWAV per pupil is determined by multiplying EWAV per pupil by the factor.

TABLE 1

PROPERTY WEALTH AND PROPERTY WEALTH ADJUSTED
FOR MEDIAN FAMILY INCOME: K-12 DISTRICTS

District	EWAV/RADM	M.F.I. Adjustment Factor	Adjusted EWAV/RADM[a]
New Shoreham	$156,792	85.1 %	$131,001
Narrangansett	63,426	101.9	63,455
Little Compton	58,788	96.8	55,871
Jamestown	57,902	97.3	55,314
Providence	45,050	86.6	38,303
South Kingstown	45,007	103.3	45,646
Scituate	37,685	109.4	40,477
North Providence	37,127	106.4	38,784
Johnstown	36,066	105.4	37,322
Pawtucket	34,491	95.2	32,237
East Providence	34,443	104.6	35,371
Cranston	33,236	110.7	36,122
Barrington	33,183	144.4	47,044
Westerly	32,883	103.5	33,415
North Smithfield	32,722	109.7	35,243
Warwick	32,522	113.0	36,081
North Kingstown	32,296	92.5	29,330
East Greenwich	32,294	129.9	41,186
Lincoln	31,647	107.9	33,526
Newport	30,142	88.3	26,131
Warren	30,049	94.7	27,938
West Warrick	29,787	97.4	28,485
Bristol	29,251	100.0	28,719
Exeter-West Greenwich	29,134	98.0	28,031
Tiverton	28,759	98.4	27,784
Portsmouth	28,060	96.9	26,695
Smithfield	26,838	115.6	30,460
Middletown	26,276	99.1	25,566
Coventry	25,968	109.2	27,841
Cumberland	23,453	116.2	26,756
Burrillville	20,960	91.9	18,911
Woonsocket	20,885	89.0	18,250
Central Falls	18,959	79.9	14,872

[a]EWAV/RADM has been modified by the state adjustment factor of .9818.

Source: Calculation of Rhode Island State Share Entitlement for School Operation 1978-79 (Computer Printout, Rhode Island Department of Education).

The median family income adjustment factors presented in Table 1 are percentages; these indicate what percentage a district's median family income is of the statewide median family income. For example, the wealthiest district, New Shoreham, has the lowest MFI factor, 85.10 percent. This indicates New Shoreham's median family income (according to the 1970 Census) represents only 85.10 percent of the statewide median family income. New Shoreham is an example of a property rich and income poor district. Its EWAV is thus reduced to account for this; New Shoreham's EWAV per pupil is $156,792 whereas after the income adjustment it is $131,001 per pupil. There are other instances when a district's property wealth does not reflect its income wealth. For example, Cumberland is one of the poorest districts in terms of its EWAV per pupil; but its median family income is higher than the statewide median family income as indicated by its adjustment factor of 116.20 percent. This indicates that Cumberland's median family income is 16.20 percent higher than the statewide median. Therefore, its property wealth is adjusted upwards: from an EWAV of $23,453 per pupil to and adjusted EWAV of $26,756 per pupil.

Examining the information in Table 1, it is possible to see that there are differences in EWAV and adjusted EWAV per pupil among Rhode Island's districts. However, from simple observation it is difficult to summarize in any systematic way what those disparities are and their magnitude. For this reason, it is useful to employ some method for summarizing disparities. First we will show you some summary measures applied to EWAV per pupil. Then we will let you calculate summary measures for adjusted EWAV.

One way to summarize is to obtain a simple <u>average</u>. The mean or average EWAV per pupil for the districts in Table 1 is $37,457. This is the sum of each district's EWAV per pupil, $1,236,081, divided by the 33 K-12 districts.

A simple average accounts for the number of districts in the state. However, it does not account for differences among districts in the number of RADM. A <u>weighted average</u> accounts for these differences and is the more common measure in the study of school finance. It is obtained by dividing the total EWAV of the 33 districts by the total number of RADM in those districts. The total EWAV for the 33 districts is obtained by adding the total EWAV for each district; it is $5,326,588,085. There are a total of 160,837 RADM in the 33 districts. Thus, the weighted average EWAV is $33,118 per pupil. Note that the weighted average is smaller than the simple average. This indicates that the districts with a higher EWAV per pupil tend to have fewer pupils.

The median is the middle value when you arrange the values according to size. In Table 1, the school districts have been arranged from the highest EWAV per pupil to the lowest. The median is the per pupil EWAV that is half way from the district with the lowest EWAV per pupil and half way from the district with the highest EWAV per pupil. There are 33 K-12 districts; the value that divides the 33 districts into two equal parts of 16 districts is the EWAV per pupil of the 17th district. Thus, the median value is North Kingston's EWAV per pupil, $32,296 per pupil.

Each type of average -- simple, weighted, and the median -- can be used to describe disparities by comparing it with the actual values for individual school districts. For example, you may indicate how much a particular district varies from the average. You may use this procedure to group districts, such as the number of districts within $500 of one of the measures and so on. However, averages do not indicate how widely dispersed the districts are. Another summary measure, the range, helps to provide this information. The range is the difference between the highest and lowest value.

Among the K-12 districts, New Shoreham has the highest EWAV per pupil, $156,792, and Central Falls the lowest, $18,959. The range is $156,792 minus $18,959 or $137,833. Often the range is represented as a ratio, found by dividing the highest value by the lowest value. For our districts in Table 1, it is $156,792 divided by $18,959 or 8.27:1. You can read this as follows: the wealthiest district has an EWAV per pupil that is 8.27 times greater than that of the poorest district. Used with the average, weighted average, or median, the range indicates how accurately the average measures represent actual values. For example, if we had obtained a range of only $100 for the districts, this would indicate that the average is fairly representative of the actual EWAV per pupil. Specifically, it would indicate that no districts EWAV per pupil differs substantially from the average EWAV because the wealthiest and poorest districts are separated by only $100. Since the range is larger for our 33 districts, the average measures are not necessarily a good representation of the actual wealth of a particular district.

Exercises on Disparities in Wealth

Using the information presented below and in Table 1, provide the missing information in Table 2 and answer the questions that follow the table.

Total Number of Pupils (RADM)	160,837
Total Adjusted EWAV	$5,329,071,183

TABLE 2

COMPARISON OF EWAV AND ADJUSTED EWAV SUMMARY MEASURES
(33 K-12 DISTRICTS)

Type	EWAV	Adjusted EWAV
Wealthiest District	$156,792	_____
Poorest District	$ 18,959	_____
Range (Wealthiest minus Poorest)	$137,833	_____
Ratio (Wealthiest divided by Poorest)	8.27:1	_____
Average	$ 37,457	_____
Weighted Average	$ 33,118	_____
Median	$ 32,296	_____

1. What district has the statewide median family income?
2. What does the income factor of the wealthiest and poorest districts indicate about those districts' median family income in relation to the statewide median family income?
3. What district experiences the largest increase in EWAV due to adjustment? What is the relationship between property wealth and income wealth for this district?
4. What district has the median adjusted EWAV per pupil and why?
5. What do the summary measures for adjusted EWAV in comparison to those for EWAV indicate about the distribution of districts' median family income in relation to the statewide median family income? Why is this so?

Distribution of Wealth

Although the summary measures you have learned about are useful tools for describing disparities, they still do not provide a complete picture. They may distort the basic patterns of wealth in the state. For example, in Table 1 it is obvious New Shoreham's wealth per pupil, an adjusted EWAV of $131,001 per pupil, differs significantly from the wealth of the other K-12 districts. Therefore, the inclusion of New Shoreham's wealth in the calculation of the summary measures may mean the measures misrepresent the basic patterns of wealth in the state.

One way to assess the representativeness of summary measures is to look at the distribution of districts within different ranges of wealth. In Table 3 we have divided districts into ranges of adjusted EWAV per pupil and have shown the number of districts and percentage of districts as well as the number and percentage of pupils within six different ranges of wealth. For example, 11 of Rhode Island's 33 K-12 districts have an adjusted EWAV per pupil between $30,000 and $39,999. This represents 33.33 percent of the districts. Over half, 56.40 percent, of the pupils attend school in these 11 districts.

TABLE 3

DISTRIBUTION OF WEALTH
(33 K-12 DISTRICTS)

Adjusted EWAV Per Pupil[a]	Number of Districts	Percent of Districts	Number of Pupils	Percent of Pupils
$60,000 or Above	2	6.06	1,795	1.12
50,000 - 59,999	2	6.06	1,357	0.84
40,000 - 49,999	4	12.12	11,090	6.90
30,000 - 39,999	11	33.33	90,707	56.40
20,000 - 29,999	11	33.33	42,076	26.16
Less than $20,000	3	9.10	13,812	8.60
	33	100.00	160,837	100.00

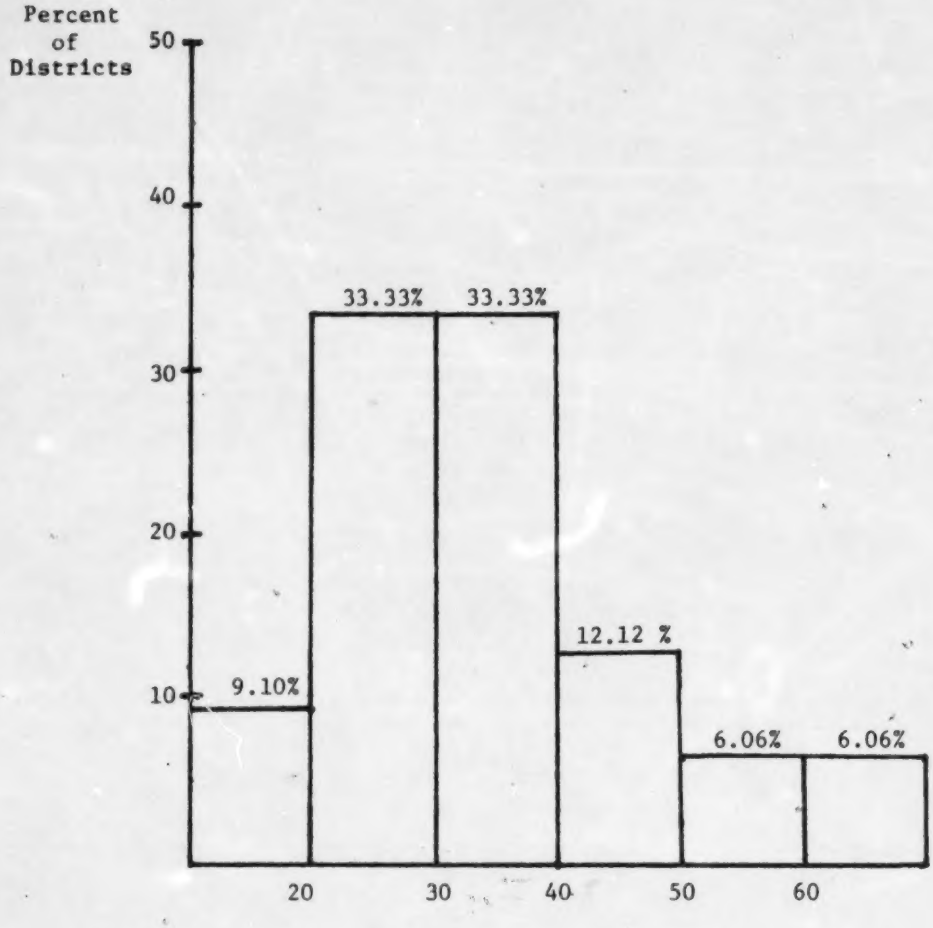
[a]The pupil count used is Public RADM.

Source: Calculation of Rhode Island State Share Entitlement for School Operation 1978-79 (Computer Printout, Rhode Island Department of Education).

Figure 1 displays the distribution of districts' wealth per pupil shown in Table 3.

FIGURE 1

DISTRIBUTION OF DISTRICTS' WEALTH PER PUPIL



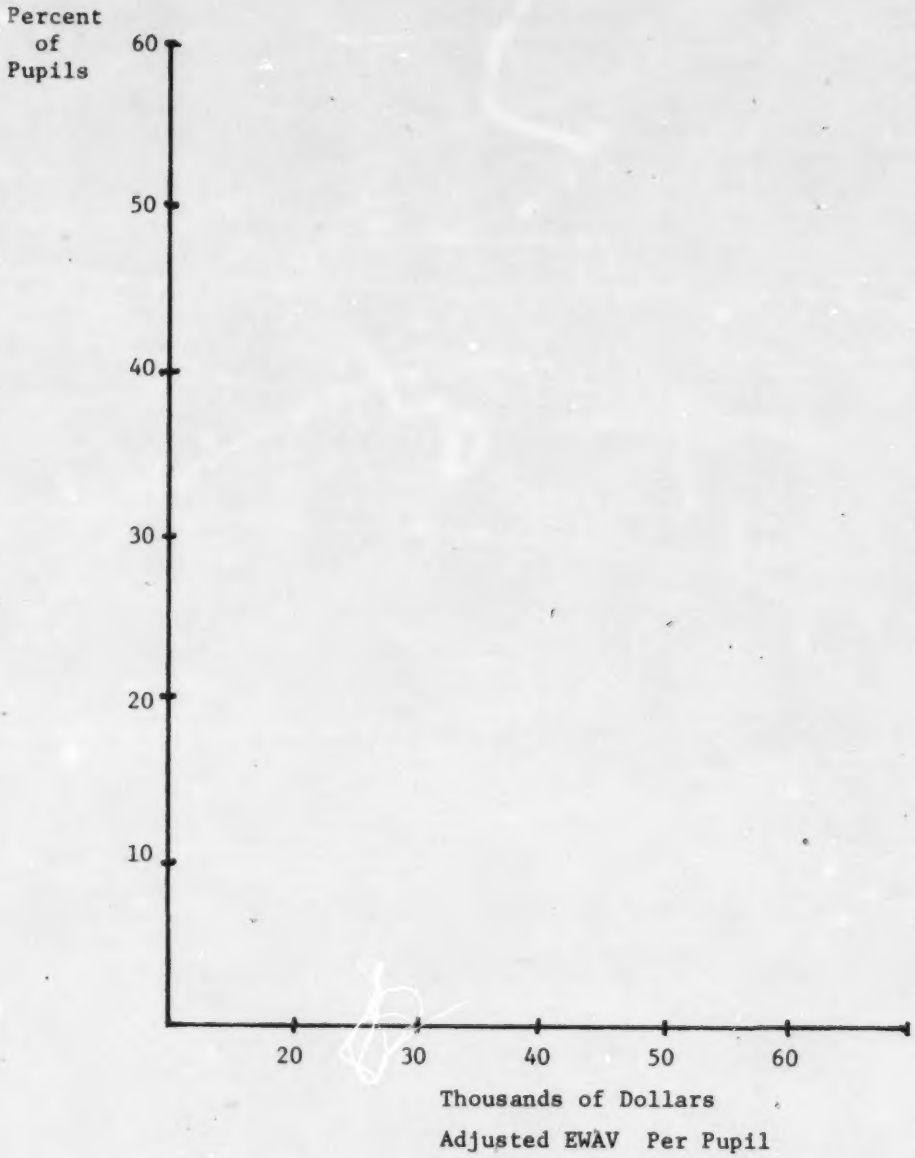
Note in Figure 1:

- Ranges of adjusted EWAV per pupil are displayed on the horizontal line.
- Each bar represents the percentage of districts within each range of wealth per pupil.
- The actual percentage of districts within each range of wealth is displayed at the top of each bar.

Exercises on Distribution of Wealth

Using the information presented in Table 3, graphically display in Figure 2 percentage of pupils within the different ranges of wealth.

FIGURE 2



6. How does the distribution of pupils compare with the distribution of districts wealth per pupil?

7. What can you say about the distribution of wealth per pupil based on Figure 1 and 2 in relation to the median adjusted EWAV per pupil?

State Share Ratio

You have seen that there are differences in the wealth supporting pupils in different Rhode Island districts. One purpose of Rhode Island's school finance plan is to reduce these differences by providing more State Aid to districts with less wealth per pupil. To see how Rhode Island's school finance plan compensates districts with less wealth, Table 3 shows the relationship between wealth per pupil and the State Share Ratio for each of the 33 K-12 districts for 1978-79. In Table 3, the districts are arranged from the district with the highest adjusted EWAV per pupil to the district with the lowest adjusted EWAV per pupil. The table shows both the State Share Ratio using Public RADM as the pupil count, and the State Share Ratio obtained from the alternative calculation of State Aid using Combined or Public and Nonpublic RADM as the pupil count for eight districts.

The table shows the lower the adjusted EWAV per pupil, the higher the district's State Share Ratio. The ralationship is not an exact one, because, as you will remember, there is a different Cost of the Basic Program for each district. Table 3 shows that the majority of the districts, 25 of the 33 K-12 districts, use the State Share Ratio obtained from the Public RADM count. Eight district's have a higher State Share Ratio by using the alternative calculation of State Aid. In addition, 12 of the 33 districts use the minimum, .30, as their State Share Ratio. Due to the minimum, Rhode Island's school finance plan in effect only equalizes the wealth of 21 of the 33 K-12 districts.

TABLE 3

WEALTH AND STATE SHARE RATIO: 1978-79

District	Adjusted EWAV Per Pupil	State Share Ratio (Public RADM)	Alternative State Share Ratio (Combined RADM)
New Shoreham	$131,001	.30	
Narrangansett	63,455	.30	
Little Compton	55,871	.30	
Jamestown	55,314	.30	
South Kingstown	45,646	.30	
Barrington	47,054	.30	
East Greenwich	41,186	.30	
Scituate	40,477	.30	
North Providence	38,784	.30	
Providence	38,303	.30	.34
Johnstown	37,322	.30	.31
Cranston	36,122	.30	
Warwick	36,081	.30	
East Providence	35,371	.30	
North Smithfield	35,243	.34	
Lincoln	33,526	.36	
Westerly	33,415	.34	
Pawtucket	32,237	.35	.41
Smithfield	30,460	.41	
North Kingstown	29,330	.43	
Bristol	28,719	.44	.46
West Warrick	28,485	.43	.46
Exeter-West Greenich	28,031	.54	
Warren	27,938	.44	
Coventry	27,841	.46	.47
Tiverton	27,784	.46	
Cumberland	26,756	.49	
Portsmouth	26,695	.48	
Newport	26,131	.47	.48
Middletown	25,566	.49	
Burrillville	18,911	.64	
Woonsocket	18,250	.63	
Central Falls	14,872	.69	.73

Sources: Calculation of Rhode Island State Share Entitlement for School Operation 1978-79 (Computer Printout, Rhode Island Department of Education).

Rhode Island Department of Education Statistical Tables 1976-1977.

Effort

You have seen that K-12 Districts are concentrated near the median adjusted EWAV per pupil indicating the districts are relatively similar in the wealth supporting each pupil. State Aid compensates for what disparities do exist. However, the lack of significant disparities in wealth by itself is not a reliable indicator of the distribution of locally raised revenue. Disparities in the ability of districts to raise revenue also depend upon the tax rates districts levy on their wealth.

Table 4 provides summary measures of the tax effort of Rhode Island's K-12 Districts. A district's tax rate is locally raised revenue for school operations divided by the district's wealth. The tax rates in Table 4 are obtained by dividing each school district's locally raised revenue for school operations by the district's full peoperty valuation. The highest tax rate, 18.49 mills, is 5.18 times as great as the lowest tax rate, 3.57 mills.

TABLE 4

SUMMARY MEASURES OF TAX EFFORT
(33 K-12 DISTRICTS)

Type of District	Amount
Highest Tax Rate	18.49
Lowest Tax Rate	3.57
Ratio (Highest divided by Lowest)	5.18:1
Median	13.64

Source: Rhode Island Department of Education Statistical Tables 1976-1977.

The lowest tax rate, 3.57 mills, is the tax levied by the wealthiest district, New Shoreham. This is because a wealthy district can raise the same amount of revenue per pupil as a poor district with less tax effort. We have already seen New Shoreham is unusual because of its wealth. We should now investigate whether New Shoreham also differs significantly from the other K-12 districts in its tax effort. Table 5 shows the distribution of tax rates for our 33 K-12 districts. As the table shows, over half of the K-12 districts, 57.58 percent, had a tax rate between 10 and 14.99 mills; 61.53 percent of the pupils attended schools in these districts. The median tax rate was 13.64 mills. Thus, the majority of districts have a tax rate close to the median tax rate.

TABLE 5

DISTRIBUTION OF OPERATING TAX RATES
(33 K-12 DISTRICTS)

Tax Rate	Number of Districts	Percent of Districts	Number of Pupils	Percent of Pupils
15.00 - 18.49	10	30.30	58,722	36.51
10.00 - 14.99	19	57.58	98,963	61.53
5.00 - 9.99	3	9.09	2,998	1.86
Under 5.00	1	3.03	154	0.10
	33	100.00	160,837	100.00

Source: Rhode Island Department of Education Statistical Tables 1976-1977.

Thus far you have seen that Rhode Island has relatively concentrated tax rates and wealth. However, the distribution of wealth and tax effort alone do not provide a complete picture of disparities in the revenue raising ability of districts. In order to obtain a more complete picture you need to compare the distribution of tax rates with different ranges of wealth; that is, you need to examine the relationship between tax rates and wealth.

Table 6 compares the distribution of wealth and effort of the 33 K-12 districts.

TABLE 6

DISTRIBUTION OF DISTRICTS' WEALTH AND EFFORT
(33 K-12 DISTRICTS)

Adjusted EWAV Per Pupil	Tax Rate for School Operations				Total Districts
	Under 5.00	5.00-9.99	10.00-14.99	15.00-18.49	
$60,000 or above	1	1	0	0	2
50,000 - 59,999	0	2	0	0	2
40,000 - 49,999	0	0	2	2	4
30,000 - 39,999	0	0	7	4	11
20,000 - 29,999	0	0	7	4	11
Less than $20,000	0	0	3	0	3
Total Districts	1	3	19	10	33

Source: Rhode Island Department of Education Statistical Tables 1976-1977.

When examining Table 6, remember districts with higher wealth per pupil and higher tax rates have greater revenue raising ability than those with lower wealth and tax rates. Comparing the distributions, you can see that most of the K-12 districts fall within two intervals of tax effort: 19 districts levied between 10 and 14.99 mills, and another 10 districts levied between 15 and 18.49 mills. These two intervals of tax effort account for 88 percent of the districts. Within these two ranges of tax effort, you can see that most districts fall within two intervals of wealth: 11 districts have an adjusted EWAV per pupil between $20,000 and $29,999 and another 11 districts between $30,000 and $39,999. Thus, for the majority of districts, 67 percent, wealth and tax effort are concentrated. Only 4 districts levy less than 10 mills and these are the same districts with an adjusted EWAV of greater than $50,000 per pupil. Therefore, it appears that for Rhode Island's K-12 districts wealth and tax efforts are related: districts with less wealth tend to tax themselves at a higher rate than the wealthy districts.

Equity in the Distribution of Resources

You have seen that Rhode Island adopts the "equal treatment for everyone" definition of equity for the raising of resources for education. In the distribution of resources too, a plan must adopt a definition of equity. Rhode Island defines equity in the distribution of resources as "different treatment for different needs." This definition of equity is translated into practice by distributing State Aid on the basis of district expenditures. This definition of equity is also reflected in Rhode Island's inclusion of Transportation Costs in the determination of a district's guaranteed Cost of the Basic Program.

Since the goals of Rhode Island's School Finance Plan include reducing the disparities associated with a district's differing abilities to raise revenue and costs of providing services, we need to examine district Expenditures.

Table 7 summarizes the operating expenditures of Rhode Island's K-12 districts. The operating expenditures of a district includes locally raised revenue, state aid, and federal aid (with the exception of ESEA funds). The district with the highest operating expenditure per pupil spent 2.30 times as much as the district with the lowest operating expenditures.

TABLE 7

SUMMARY MEASURES OF OPERATING EXPENDITURES PER PUPIL
(33 K-12 DISTRICTS)

Type of District	Amount
Highest Expenditure	$2,680
Lowest Expenditure	$1,158
Ratio (Highest divided by Lowest)	2.3:1
Median	$1,422

Source: Rhode Island Department of Education Statistical Tables 1976-1977.

Once again, New Shoreham is unusual, having the highest per pupil operating expenditure of $2,680. This reflects New Shoreham's greater ability to raise revenue for education than the other K-12 districts. Table 8 shows the distribution of operating expenditures per pupil. As Table 8 shows, the largest number of districts have an operating expenditure either in the $1,200 to $1,399 interval or between $1,400 and $1,599 per pupil. These two intervals of expenditures account for 63 percent of the districts; 58 percent of the pupils attend school in these districts.

TABLE 8

DISTRIBUTION OF OPERATING EXPENDITURES PER PUPIL

Operating Expenditures Per Pupil	Number of Districts	Percent of Districts	Number of Pupils	Percent of Pupils
$1,800 or Above	3	9.09	20,312	12.63
1,600 - 1,700	5	15.15	29,682	18.45
1,400 - 1,599	10	30.30	49,781	30.95
1,200 - 1,399	11	33.33	45,485	28.28
Less than 1,200	4	12.12	15,577	9.68

Source: Rhode Island Department of Education Statistical Tables 1976-1977.

Rhode Island's School Finance Plan is intended to reduce disparities arising from differences among districts in revenue raising ability and costs of education. We should now look at the relationship between operating expenditures and district ability to support education. You have already seen that district wealth and tax effort are relatively concentrated. Table 9 shows the average wealth and tax effort of districts within each range of operating expenditures. The table shows that greater wealth is associated with higher expenditures. While the lowest average tax rate appears for the highest expenditure level, $1,800 and above; the highest average tax is associated with the next interval of spending, $1,600 - $1,799. Thereafter, lower expenditure levels are associated with less wealth as well as lower average tax effort.

TABLE 9

OPERATING EXPENDITURES, WEALTH, AND TAX EFFORT

Operating Expenditure Per Pupil	Weighted Average Adjusted EWAV	Average Tax Effort	Number of Districts
$1,800 or Above	$39,561	9.05	3
1,600 - 1,799	35,221	16.83	5
1,400 - 1,599	34,169	14.71	10
1,200 - 1,399	29,342	12.84	11
Less than 1,200	28,528	11.01	4

Source: Rhode Island Department of Education Statistical Tables 1976-1977.

In this chapter you have seen there are differences in the wealth, effort, and expenditure of districts within Rhode Island. Using summary measures and examining distributions, you have seen that Rhode Island's districts are relatively concentrated in the wealth backing pupils, in the tax effort to support education and in per pupil expenditures. However, how you interpret the differences that do exist and the summary measures depends on your own value judgment concerning what the relationship is and should be between wealth, effort, need and expenditures.

APPENDIX A

CALCULATION OF STANDARD TAX RATE

In Rhode Island, the Standard Tax Rate is the tax rate used in the calculation of a district's Local Share for the purposes of the State Aid formula. It is the tax rate a district of average per pupil wealth would have to levy in order to contribute 65 percent of the average Cost of the Basic Program. To calculate the Standard Tax Rate requires three steps: 1) determining the average Cost of the Basic Program; 2) determining the average wealth per pupil for the state; and 3) determining the tax rate which, applied to the average wealth, will raise 65 percent of the average Cost of the Basic Program.

1) Average Cost of the Basic Program. The average Cost of the Basic Program for the state is determined by dividing the Total Cost of the Basic Program for the state by the total number of pupils in the state. The Total Cost of the Basic Program is the Mandated Minimum of $900 multiplied by the total number of pupils in the state plus Total Transportation Costs for the state. Thus,

$$\text{Average Cost of the Basic Program} = \frac{(\text{State RADM} \times \$900) + \text{State Transportation Costs}}{\text{State RADM}}$$

For example, assume the state has 10,000 RADM and the Total Transportation Cost for the state is $3,000,000. The Average Cost of the Basic Program is then,

$$\begin{aligned}\text{Average Cost of the Basic Program} &= [(10{,}000 \times \$900) + \$3{,}000{,}000] / 10{,}000 \\ &= (\$9{,}000{,}000 + \$3{,}000{,}000) / 10{,}000 \\ &= \$12{,}000{,}000 / 10{,}000 \\ &= \$1{,}200\end{aligned}$$

Remember there are two possible pupil counts - Public RADM or Combined RADM - and each pupil count will produce a different Standard Tax Rate.

2) Average Wealth. The average wealth per pupil is the total adjusted EWAV of the state divided by the total number of pupils in the state. Assume the total adjusted EWAV for the state is $300,000,000. In our

example the state has 10,000 pupils; thus, the average wealth per pupil in $300,000,000/10,000 or $30,000 per pupil.

3) Standard Tax Rate. Once the average wealth and average Cost of the Basic Program are known, the state determines the tax rate the average wealth district would have to levy in order to raise 65 percent of the average Cost of the Basic Program. To determine this tax rate, divide the state average Cost of the Basic Program by the state average wealth and multiply this amount by .65. Thus,

$$\text{Standard Tax Rate} = .65 \times \left(\text{State Average Cost of the Basic Program} \;/\; \text{State Average Wealth Per Pupil}\right)$$

The Standard Tax Rate for our example with $1,200 as the average Cost of the Basic Program and $30,000 per pupil as the average wealth is,

$$\begin{aligned} \text{Standard Tax Rate} &= .65 \times (\$1{,}200/\$30{,}000) \\ &= .65 \times .04 \\ &= .0260 \end{aligned}$$

To convince yourself that the Standard Tax Rate for our example raises 65 percent of the average Cost of the Basic Program, if we multiply the average wealth, $30,000, by the Standard Tax Rate for our example, .0260, we obtain a Local Share of .0260 x $30,000 or $780 per pupil. To determine what percentage this is of the average Cost of the Basic Program, divide $780 by the average Basic Program Cost, $1,200, and you obtain $780/$1,200 or .65. Recall that the state will provide 35 percent of the average Cost of the Basic Program for the average wealth district. The proof of this is the State Share Ratio for our average cost and average wealth district: Foundation Aid is $1,200 - $780 or $420 per pupil; the State Share Ratio is then $420/$1,200 or .35.

The state determines the Standard Tax Rate each year in the manner we have just described. It is important for you to remember there are two Standard Tax Rates: one obtained by using Public RADM and the other based on Combined RADM.

APPENDIX B

EXPENDITURES

You have seen that State Aid is a district's Expenditures per pupil multiplied by its State Share Ratio. The Expenditures to which the State Share Ratio is applied are defined as the district's Total Operating Expenditures (including tuitions transferred to other school districts) minus tuitions received from other school districts, federal aid to impacted districts (P.L. 874 funds), other federal and state categorical aid and miscellaneous funds. In addition, Expenditures for the purpose of calculating State Aid do not include Capital Outlay or Debt Service expenditures.

APPENDIX C

EQUALIZED WEIGHTED ASSESSED VALUATION

For the purposes of calculating State Aid, Rhode Island defines wealth as adjusted Equalized Weighted Assessed Valuation. Equalized Weighted Assessed Valuation is an attempt to arrive at a valuation for each district which is comparable across districts. To arrive at a district's EWAV, the following steps are taken by the Tax Equalization Section of the Department of Community Affairs: 1) Determine at what percentage of full market value each town and community's property is being assessed; 2) weight the district's assessed valuation by the ratio of assessment to reflect its full valuation; and 3) equalize each district's weighted assessed valuation.

1) Ratio of Assessment. The state arrives at a ratio of assessment for each town and community. This ratio represents the percentage of full valuation at which the district's valuation is being assessed.

2) Weighted Assessed Valuation. Each district's assessed valuation is weighted by its ratio of assessment to reflect full market valuation. To determine a district's weighted assessed valuation (or its full valuation) divide the district's assessed valuation by its ratio of assessment. For example, a district with an assessed valuation is $ 30,000,000 and with a ratio of assessment of .60 (or 60 percent) has a weighted assessed valuation of $30,000,000/.60 or $50,000,000.

3) Equalized Weighted Assessed Valuation. To determine EWAV, each district's weighted assessed valuation (or full valuation) is multiplied by the state average ratio of assessment. The state average ratio of assessment used in measuring wealth for the 1978-79 calculation of State Aid is approximately 47.74 percent. This ratio of assessment, expressed as a decimal value (.4774) is applied to each district's weighted assessed valuation to obtain EWAV. Thus, for our example district, EWAV is its weighted assessed valuation of $50,000,000 x .4774 or $23,870,000.

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Commission to Study Public School Funding (1978) The Special Legislative Commission to Study Public School Funding (Report).

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GLOSSARY

ADJUSTED EWAV: The measure of wealth used in Rhode Island's State Aid formula. It is the district's Equalized Weighted Assessed Valuation multiplied by its Median Family Income (M.F.I.) Adjustment factor.

COMBINED RADM: A pupil count used in the alternative calculation of state aid. This pupil count includes public, private and parochial school pupils.

COST OF THE BASIC PROGRAM: The name given the state guarantee composed of the Mandated Minimum Program of $900 per pupil and district Transportation Costs per pupil.

EQUALIZED WEIGHTED ASSESSED VALUATION (EWAV): A district's assessed valuation weighted by the percentage its assessed valuation bears to its full valuation and equalized by the statewide average ratio of assessment. EWAV is an attempt to arrive at a valuation for each district which is comparable across districts.

FOUNDATION AID: The State Share of a district's Cost of the Basic Program. It is obtained by subtracting the Local Share from the Cost of the Basic Program.

LOCAL SHARE: The district contribution toward the Cost of Basic Program. It is the district wealth per pupil multiplied by the Standard Tax Rate.

MANDATED MINIMUM PROGRAM: A fixed amount established by the State Board of Regents as part of the Cost of the Basic Program. The guaranteed amount is currently set at $900 per pupil. No district can expend less than the Mandated Minimum Program in order to participate in the State Aid Program. District expenditures are such, that no district is affected by this provision.

MEDIAN FAMILY INCOME (M.F.I.) ADJUSTMENT FACTOR: The factor applied to a district's EWAV to determine the adjusted EWAV used in the State Aid formula.

PUBLIC RADM: A pupil count used in the calculation of state aid which includes only public school pupils. Most Rhode Island districts receive state aid on the basis of Public RADM.

RESIDENT AVERAGE DAILY MEMBERSHIP (RADM): The basic pupil count used in Rhode Island's State Aid formula. It is the average number of resident pupils enrolled on a day. It is calculated by dividing the total number of days resident pupils are enrolled in school by the total number of school days. Only one-half of kindergarten membership is included in a district's RADM.

STANDARD TAX RATE: A computational tax rate used in the calculation of the Local Share. It is the tax rate the average wealth district would have to levy to contribute 65 percent of the average Cost of the Basic Program.

STATE SHARE RATIO: The percentage of a district's expenditures that it will receive as State Aid. There is a minimum State Share Ratio of .30. The State Share Ratio is calculated by dividing a district's Foundation Aid per pupil by its Cost of the Basic Program per pupil.

ANSWER KEY

ANSWER KEY

Exercises on Cost of the Basic Program

1. c $900 + $76 = $976

2. c $900 + $55 = $955

3. d $900 + $125 = $1025

Exercises on Local Share

4. c

1) Kindergarten RADM
   500 x .50 = 250
2) Grades 1 - 12 RADM
   8000
3) Total RADM
   8000 + 250 = 8250

5. c

$42,000,000/$1,200 = $35,000

6. d (302.56)

$16,000 x .01891 = $302.56

7. d (416.02)

$22,000 x .01891 = $416.02

8. d

1) Adjusted EWAV per RADM
   $40,000,000/1000 = $40,000
2) Local Share
   $40,000 x .01891 = $756.40

Exercises on Calculation of Foundation Aid

9. d

$1600 - $450 = $1150

10. d ($700)

1) Cost of Basic Program
$900 + $400 = $1300

2) Foundation Aid
$1300 - $600 = $700

11. c

1) Local Share
$24,000 x .01891 = $453.84

2) Foundation Aid
$1200 - 453.84 = $746.16

12. c

1) Adjusted EWAV per pupil
$30,000,000 / 1500 = $20,000

2) Local Share
$20,000 x .01891 = $378.20

3) Foundation Aid
$1400 - $378.20 = $1021.80

13. a

1) Cost of Basic Program
$900 + 300 = $1200

2) Adjusted EWAV per pupil
$60,000,000 / 2,000 = $30,000

3) Local Share
$30,000 x .01891 = $567.30

4) Foundation Aid
$1,200 - $567.30 = $632.70

Exercises on State Share Ratio

14. a

$330 / $960 = .3438

15. a

1) Foundation Aid

$1,400 - $1,000 = $400

2) State Share of Foundation Program

$400 / $1,400 = .2857

3) State Share Ratio

Minimum = .30

16. b

1) Cost of the Basic Program

$900 + $75 = $975

2) Foundation Aid

$975 - $325 = $650

3) State Share Ratio

$650 / $975 = .6667

17. b

1) Local Share

.01891 x $32,000 = $605.12

2) Foundation Aid

$1,250 - $605.12 = $644.88

3) State Share Ratio

$644.88 / $1,250 = .5159

Exercises on State Share Ratio (cont.)

18. c

1) Cost of the Basic Program
   $900 + $125 = $1,025
2) Local Share
   .01891 x $28,000 = $529.48
3) Foundation Aid
   $1,025 - $529.48 = $495.52
4) State Share Ratio
   $495.52 / $1,025 = .4834

19. d (.4211)

1) Cost of the Basic Program
   $900 + $80 = $980
2) Wealth per pupil
   $60,000,000 / 2,000 = $30,000
3) Local Share
   .01891 x $30,000 = $567.30
4) Foundation Aid
   $980 - $567.30 = $412.70
5) State Share Ratio
   $412.70 / $980 = .4211

Exercises on State Aid

20. $943.50

.74 x $1,275 = $943.50

21. $495

1) Minimum State Share Ratio = .30

2) State Aid

.30 x $1,650 = $495

22. c

1) Foundation Aid

$1,400 - $900 = $500

2) State Share Ratio

$500 / $1,400 = .3571

3) State Aid

.3571 x $2,300 = $821.33

23. c

1) State Share Ratio

$600 / $1.200 = .50

2) State Aid

.50 x $1,200 = $600

24. c

1) Cost of the Basic Program

$900 + $125 = $1,025

2) Local Share

.01891 x $25,000 = $472.75

3) State Share Ratio

$472.75 / $1,025 = .4612

4) State Aid

.4612 x $1,600 = $737.92

Exercises on State Aid (cont.)

25. c

1) Cost of the Basic Program
   $900 + $450 = $1,350

2) Wealth per pupil
   $90,000,000 / 1,500 = $60,000

3) Local Share
   .01891 x $60,000 = $1,134.60

4) Foundation Aid
   $1,350 - $1,134.60 = $215.40

5) State Share of Foundation Program
   $215.40 / $1,350 = .15

6) Minimum State Share Ratio = .30

7. State Aid
   .30 x $2,300 = $630

Exercises on Calculation of Alternative State Aid

26. c

1) Transportation Costs Per Pupil
   $24,000/1000 = $24
2) Cost of Basic Program
   $900 + $24 = $924

27. d

1) Transportation Costs Per Pupil
   $24,000/1200 = $20
2) Cost of Basic Program
   $900 + $20 = $920

28. a

1) Adjusted EWAV Per RADM
   $24,000,000/1000 = $24,000
2) Local Share
   $24,000 x .01891 = $453.84

29. d

1) Adjusted EWAV Per RADM
   $24,000,000/1200 = $20,000
2) Local Share
   $20,000 x .02178 = $435.60

30. b

$924.00 - $453.84 = $470.16

31. d

$920.00 - $435.60 = $484.40

32. c

1) State Share Ratio using Public RADM
   $470.16/$924 = .5088
2) State Share using combined RADM
   $484.40/$920 = .5263
3) .5263 is higher

33. $1578.90

$3000 x .5263 = $1578.90

Exercises on Hold Harmless

34. d ($270,000)

.90 x $300,000 = $270,000

35. a

1) Hold Harmless Level

.90 x $600,000 = $540,00

2) State Aid

$575,000

36. d ($675,000)

1) Hold Harmless Level

.90 x $750,000 = $675,000

2) State Aid

$675,000

Exercises on the Effect of District Wealth on State Aid

37. c

1.10 x $20,000 = $22,000

38. d ($538.94)

1) EWAV per pupil
$75,000,000 / 2,500 = $30,000

2) Adjusted EWAV per pupil
.95 x $30,000 = $28,500

3) Local Share
.01891 x $28,500 = $538.94

39. d (.55)

1) Foundation Aid
$1,200 - $538.94 = $661.06

2) State Share Ratio
$661.06 / $1,200 = .55

40. d ($990)

.55 x $1,800 = $990

41. $954 (less)

1) Local Share
.01891 x $30,000 = $567.30

2) Foundation Aid
$1,200 - $567.30 = $632.70

3) State Share Ratio
$632.70 / $1,200 = .53

4) State Aid
.53 x $1,800 = $954

Exercises on the Effect of District Wealth on State Aid (cont.)

42. $828 (less)

1) Adjusted EWAV per pupil
   1.15 x $30,000 = $34,500
2) Local Share
   .01891 x $34,500 = $652.40
3) Foundation Aid
   $1,280 - $652.40 = $547.60
4) State Share Ratio
   $547.60 / $1,200 = .46
5) State Aid
   .46 x $1,800 = $828

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